

**IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF PENNSYLVANIA**

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| MUTUAL BENEFIT INSURANCE COMPANY, | : | CIVIL ACTION NO. 1:12-CV-2108 |
| | : | |
| Plaintiff | : | (Chief Judge Conner) |
| | : | |
| v. | : | |
| | : | |
| KAZ, INC., | : | |
| | : | |
| Defendant | : | |

MEMORANDUM

This is a civil action filed by plaintiff Mutual Benefit Insurance Company (“MBIC”), as subrogee of Betty and Allen Miller, alleging strict liability, negligence, and breach of warranty against defendant Kaz, Inc. (“Kaz”). MBIC seeks reimbursement of monies paid pursuant to an insurance policy issued to the Millers, whose house was damaged in a fire. MBIC alleges that Kaz designed, manufactured, distributed, and sold a vaporizer that caused the fire. Presently before the court is Kaz’s motion (Doc. 12) *in limine* to exclude the testimony of one of MBIC’s submitted experts, Randolph Marshall of Marshall Forensic, LLC. For the following reasons, the court will deny the motion.

I. Background

MBIC filed the instant action on October 22, 2012. Discovery closed on August 30, 2013. MBIC identified two experts, Barry Emig of Kufta Associates (“Emig”), and Randolph Marshall (“Marshall”) of Marshall Forensic, LLC. Both experts visited the fire scene and participated in a subsequent evidence inspection.

(Doc. 16 at 5). MBIC retained Emig as a general cause and origin expert. He concluded that the fire's point of origin was the living room, specifically at the power cord of the vaporizer manufactured by Kaz. (See Doc. 16-1, Ex. A at 4). Emig determined that the power cord failed and ignited the carpeting and other nearby combustibles. (Id. at 11).

MBIC retained Marshall as an expert on electrical origin and cause. (Doc. 16-2, Ex. B at 9). Marshall concluded that the fire's point of origin was the power cord of the Kaz vaporizer. (Doc. 12-1, Ex. A at 8, Doc. 16-4, Ex. D at 9). Using the NFPA 921, a book published by the National Fire Protection Association, and specifically § 18.2.1, Marshall considered and eliminated all other possible causes for the failure of the cord and determined that the only possible cause was a manufacturing defect. (See, e.g., Doc. 12-2, Ex. B at 3; Doc. 16-3, Ex. C at 4).

MBIC filed the instant motion (Doc. 12) *in limine*, which asserts that, pursuant to Federal Rule of Evidence 702, Marshall's testimony, reports, and opinion should not be admitted at trial because his conclusions are not based upon sound methodology and technique. The court has reviewed copies of Marshall's initial engineering report, Marshall's engineering rebuttal report, Emig's report, and a copy of Marshall's deposition transcript. (See Docs. 12-1, 12-2, 12-3, Exs. A-C; Docs. 16-1, 16-2, 16-3, 16-4, Exs. A-D). The motion is fully briefed and ripe for disposition.

II. Legal Standard

MBIC bears the burden of establishing the admissibility of Marshall's testimony, reports, and opinion by a preponderance of the evidence. See Burke v. TransAm Trucking, Inc., 617 F. Supp. 2d 327, 331 (M.D. Pa. 2009); see also In re Paoli R.R. Yard PCB Litig., 35 F.3d 717, 744-46 (3d Cir. 1994). Admissibility of expert testimony is a question of law governed by Federal Rule of Evidence 702. See Daubert v. Merrell Dow Pharms., Inc., 509 U.S. 579, 588-89 (1993). The rule provides:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if: (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.

FED. R. EVID. 702. According to the Third Circuit, Rule 702 sets forth three separate restrictions on the admission of expert testimony: qualification, reliability, and fit. Calhoun v. Yamaha Motor Corp., U.S.A., 350 F.3d 316, 321 (3d Cir. 2003) (quoting Schneider v. Fried, 320 F.3d 396, 405 (3d Cir. 2003)). Rule 702 embraces a "liberal policy of admissibility," pursuant to which it is preferable to admit any evidence that may assist the trier of fact. Pineda v. Ford Motor Co., 520 F.3d 237, 243 (3d Cir. 2008) (quoting Kannankeril v. Terminix Int'l, Inc., 128 F.3d 802, 806 (3d Cir. 1997)).

Kaz contests the "reliability" of Marshall's proposed testimony. Expert testimony is "reliable" when it is based upon sound methodology and technique. In

re Paoli, 35 F.3d at 742. The touchstone is whether the expert's methodology is "sufficiently reliable so that it will aid the jury in reaching accurate results." Id. at 744 (internal quotation omitted). The standard for reliability is not high. Id. at 744 ("The grounds for the expert's opinion merely have to be good, they don't have to be perfect."). The court looks to several non-exhaustive factors to guide our reliability inquiry:

- (1) whether a method consists of a testable hypothesis;
- (2) whether the method has been subject to peer review;
- (3) the known or potential rate of error; (4) the existence and maintenance of standards controlling the technique's operation; (5) whether the method is generally accepted;
- (6) the relationship of the technique to methods which have been established to be reliable; (7) the qualifications of the expert witness testifying based on the methodology; and (8) the non-judicial uses to which the method has been put.

Pineda, 520 F.3d at 248 (citing Paoli, 35 F.3d at 742 n.8).

III. Discussion

Marshall's testimony, reports, and opinion are reliable pursuant to Rule 702. Marshall clearly stated in his rebuttal report and his deposition that his analysis followed NFPA 921, Guide for Fire and Explosion Investigations. (See, e.g., Doc. 16-3, Ex. C at 4). Section 18.2.1 of the NFPA 921 provides that:

Any determination of fire cause should be based on evidence rather than on the absence of evidence; however, when the origin of the fire is clearly defined, it is occasionally possible to make a credible determination regarding the cause of the fire, even when there is no physical evidence of the ignition source available. This finding may be accomplished through the credible elimination of all other potential ignition sources, provided that the remaining ignition source is consistent with all known facts.

(Id.)

Marshall's use of § 18.2.1 is appropriate because the origin of the fire is clearly defined: the parties agree that the fire originated in the northwest part of the living room, where the vaporizer was located. Emig had already concluded that the only possible cause of the fire was electrical. (See Doc. 16-4, Ex. D at 4). From there, Marshall methodically eliminates all other potential ignition sources except for the vaporizer's power cord, and then eliminates all other potential causes for the cord's ignition other than a manufacturing defect.

Marshall's report analyzes each electrical device in the living room, including a space heater, fan, nightlight, extension cords, and a heating pad. (Id. at 4-5). The power cord for the vaporizer was the only device in the living room that exhibited any evidence of electrical activity. Specifically, Marshall observes evidence of electrical arcing on each piece of the cord, which was in two pieces. (Id. at 5). Marshall acknowledges that, pursuant to NFPA 921, "[e]vidence of electrical activity alone does not prove that it is the cause of the fire." (Id. at 6). However, Marshall effectively eliminates any other potential cause of the fire.

Having concluded that the vaporizer cord was the cause of the fire, Marshall then methodically addresses possible causes of the cord's malfunction. (Id. at 6-8). Marshall eliminates all other potential reasons for the malfunction, including the possibility of external damage to the cord, improper use by the owner, and the age of the cord. (Id.) Thus, through the process of elimination provided by § 18.2.1 of NFPA 921, Marshall concludes that the only possible cause was a manufacturing

defect.¹ However, Marshall could not identify the specific defect because of the damage caused to the cord by the fire. (Id. at 8).

Numerous courts have recognized NFPA 921 as reliable for purposes of Rule 702. See, e.g., Hoang v. Funai Corp., Inc., 652 F. Supp. 2d 564 (M.D. Pa. 2009); Booth v. Black & Decker, Inc., 166 F. Supp. 2d 215, 220 (E.D. Pa. 2001); United States v. Zhou, Crim. A. No. 06-286, 2008 WL 4067103, *5 (D.N.J. Aug. 25, 2008) (citing Fireman's Fund Ins. Co. v. Canon U.S.A., Inc., 394 F.3d 1054, 1057-58 (8th Cir. 2005)). In Hoang, plaintiff's expert determined that a TV/VCR unit caused a house fire using the process of elimination delineated in NFPA 921 § 18.2.1. The court determined that the use of § 18.2.1 was justified under the circumstances and that "there is not such a great gap between the data and the conclusion reached to render [the expert's] opinion unreliable." Hoang, 652 F. Supp. 2d at 574.

Kaz asserts that the facts underlying its motion are mostly closely aligned with Pappas v. Sony Electronics, Inc., 136 F. Supp. 2d 413 (W.D. Pa. 2000), where the court rejected the proffered expert testimony of an electrical engineer hired to investigate the cause of a house fire. In Pappas, the proffered expert determined that a defect in a television set caused the fire based primarily on his visual observation of the television's damage and burn patterns as well as a review of the

¹ Kaz asserts that Marshall erroneously applied NFPA 921 because NFPA is a guideline for determining the cause and origin of fires, not a guideline for determining the presence of a manufacturing defect. However, Marshall only discovered the presence of a manufacturing defect as a consequence of his determination of the cause and origin of the fire.

television's schematics. Id. at 417-20. However, the expert could not identify the exact component of the television that caused the fire. Id. at 418. The court determined that the expert's methodology did not survive Daubert scrutiny because there was no evidence that fire investigators commonly analyze burn patterns to determine the cause of a fire, and the expert admitted that he did not follow any fixed set of guidelines, such as the NFPA. Id. at 423-25.

The case *sub judice* is clearly distinguishable from Pappas. Marshall claims that he followed the methodology set forth in NFPA 921. Kaz has not alleged that Marshall deviated from that methodology. Indeed, it would be very easy for Kaz's experts to replicate Marshall's methods. The origin of the fire was clearly defined and Marshall employed a process of elimination pursuant to § 18.2.1 to determine its cause.

Kaz emphasizes that Marshall was unable to definitively identify the defect that caused the fire and instead only cited two manufacturing defects that commonly cause fires. Kaz further claims that Marshall's testimony is not reliable because he did not perform any testing to determine which possible defect could have caused the fire.

Under Daubert, there is no reason why Marshall must specifically identify the exact manufacturing defect at issue for his opinion to be admissible. A scientifically valid demonstration that a manufacturing defect caused the fire is

sufficient, even if the exact nature of that defect remains unknown.² See Nationwide Ins. Co. v. Sears Roebuck and Co., Civ. A. No. 11-7866, 2013 WL 1389766, at *3 (E.D. Pa. April 3, 2013) (“The fact that Plaintiff has not identified what specifically within the control panel caused the damage is of no import.”); Erie Ins. Exch. v. Applica Consumer Prods., Inc., Civ. A. No. 02-1040, 2005 WL 1165562, at *7 (M.D. Pa. May 17, 2005) (“Marshall’s opinion is not rendered unreliable and inadmissible simply because he failed to determine the exact component of the coffee maker that caused the ignition of the internal fire.”). Moreover, Kaz does not identify any tests that Marshall should have employed to specifically pinpoint the defect at issue. Indeed, Marshall states that he cannot identify the exact manufacturing defect at issue due to the extent of the damage caused by the fire. (Doc. 16-4, Ex. D at 8).

The court finds that MBIC has established the admissibility of Marshall’s testimony, reports, and opinion by a preponderance of the evidence. Marshall’s proposed testimony is based upon sound methodology and technique, and will aid the jury in reaching an accurate result.

² Such a demonstration is also consistent with the malfunction theory of products liability under Pennsylvania law. See Barnish v. KWI Bldg. Co., 980 A.2d 535, 541 (Pa. 2009). To prevail on its strict liability claim, MBIC need not establish a specific defect, but must only demonstrate the absence of all other possible causes.

IV. Conclusion

For the foregoing reasons, the court will deny Kaz's motion (Doc. 12) *in limine*. An appropriate order follows.

/S/ CHRISTOPHER C. CONNER
Christopher C. Conner, Chief Judge
United States District Court
Middle District of Pennsylvania

Dated: February 20, 2014